

2021 National Legal Research Teach-In Kit

Research Instruction & Patron Services Special Interest Section
American Association of Law Libraries

Syllabus: Analytics for Lawyers, Leveraging Social Science Research for Effective Advocacy

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This is a syllabus for a one hour, experiential, graded, advanced legal research course. Included are fourteen different modules covering analytic tools, topics, and techniques that lawyers should know about for the purposes of advocacy. Much of it centers around litigation analytics. However, other data analytical concepts are also covered: corpus linguistics, networks, statistics, correlation / regression analysis, empirical analysis of the work of courts, expert witness analytics, gerrymandering analytics, the ethics of litigation analytics, and the AI future of law. Included is a default litigation analytics final assignment for those students who chose not to do another type of analysis for a hypothetical advocacy context. I will liberally share my materials when requested.

To view the entire kit, please visit <URL for this year's kit: TBD>



UNIVERSITY OF NOTRE DAME

L70214: Analytics for Lawyers, Leveraging Social Science Research for Effective Advocacy

Spring 2021 – Room: Biolchini 1310

Mondays, 11:00 AM to Noon (12:00 PM) (**Bring Laptops**)

1 Credit Course

Experiential Learning

Syllabus Version Date: April 29, 2021

Instructor: Peter A. Hook (<https://law.nd.edu/directory/peter-hook/>)

Email: phook2@nd.edu

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Office: 2311 Kresge Law Library, Biolchini Hall

Office Hours: Virtual only. No in-person. Due to the pandemic, all meetings with the instructor must be scheduled ahead of time via Calendly <https://calendly.com/phook2>.

Communicating with the Instructor

I am readily available by email. I will make every effort to respond to all email within 24 hours. You may also call me on my office phone.

Course Description and Course Objectives

Course Description

Ever since the advent of the Brandeis Brief, social science research has been marshalled for effective judicial advocacy. This course will survey and contextualize past uses of social science research and will equip students with the ability to effectively locate social science research for improved advocacy. Students will become familiar with a wide range of social science research tools and will be able to use them to marshal evidence for a particular litigation scenario. Additionally, students will learn an analytical framework in order to identify the insight needs required for a particular courtroom application. Tools and concepts include: Bloomberg Analytics, Westlaw Analytics, Lex Machina (Lexis), Context (Lexis), network visualization tools, Microsoft Excel, statistical and regression analysis, gerrymandering analytics, census data, geographic

information systems, expert witness analytics, empirical analysis of courts, and corpus linguistics and its legal applications.

Course Objectives

After completing this course, students will be able to:

1. Understand and contextualize past uses of social science research for effective judicial and administrative advocacy.
2. Select the appropriate social science research tool to accomplish a particular analytical task.
3. Identify insight needs from a framework of available insight need types: (1) categorizing and clustering, (2) ordering, ranking, and sorting, (3) distribution, (4) comparison, (5) trends, (6) geospatial location, (7) composition, and (8) relationships.
4. Locate social science research and analysis in order to be a more effective advocate.
5. Understand and recognize some of the litigation tools used to present analytical research in courtrooms and legal briefs.
6. Effectively communicate research findings.

COVID-19

Health and Safety Protocols

In this class, as elsewhere on campus, students must comply with all University health and safety protocols, including:

- Face masks that completely cover the nose and mouth will be worn by all students and instructors;
- Physical distancing will be maintained in all instructional spaces;
- Students will sit in assigned seats throughout the semester, which will be documented by faculty for purposes of any needed contact tracing; and
- Protocols for staged entry to and exit from classrooms and instructional spaces will be followed.

We are part of a community of learning in which compassionate care for one another is part of our spiritual and social charter. Consequently, compliance with these protocols is an expectation for everyone enrolled in this course. If a student refuses to comply with the University's health and safety protocols, the student must leave the classroom and will earn an unexcused absence for the class period and any associated assignments/assessments for the day. Persistent deviation from expected health and safety guidelines may be considered a violation of the University's "[Standards of Conduct](#)," as articulated in [du Lac: A Guide for Student Life](#), and will be referred accordingly.

Health Checks and Attendance

Every morning, members of the Notre Dame Community will be asked to complete a daily health check and submit their information via the Return to Campus Advisor application. The health check application will indicate one of the following:

- Student is cleared for class and should attend class in person; or
- Student is advised to stay home to monitor symptoms and should participate in class virtually and complete all assignments and assessments; or

- Student must consult a healthcare provider and should contact University Health Services (UHS) for an assessment. In the meantime, the student should participate in class virtually and complete all assignments and assessments. Depending on the medical assessment, UHS will follow the University's standard protocol for obtaining an excused absence for medical reasons.

Course Policies

Attendance Policy

Attendance is mandatory and will be taken. As directed by your daily COVID-19 health checks, you must attend in person, or virtually via Zoom. If you miss two or more classes with unexcused absences, your final grade will be lowered by one-third of a letter grade (e.g., B+ is lowered to a B.) For information regarding excused absences, please see the Hoynes Code §6.2 located at https://law.nd.edu/assets/211896/hoynes_code_sept_2016_rev.pdf.

Academic Integrity

It is a violation of the Notre Dame Law School Honor Code 2.3.2 "To submit as one's own work the work of another." https://law.nd.edu/assets/280199/honor_code.pdf

Grading

Grading will be based on the mandatory Law School curve.

Course Webpage

The course webpage contains the syllabus & calendar, assignments, announcements, class slides, web links, and other course materials. Please check the page regularly. **The professor will supply the link as we are piloting one of two Learning Management Systems (LMS) to replace Sakai, D2L's Brightspace.**

Laptops

Please bring a laptop to each class session as you will regularly look at online sources in class. Please tell me if you encounter any problems with having a laptop in class.

Late Assignments

All assignments must be completed by class time on the date specified in the Class Schedule. Late assignments may result in a reduction of your final grade; each assignment that is late by up to one week will reduce your final letter grade by one-third of a letter grade (e.g., B+ will become a B) and each one that is late by more than a week will reduce your final grade by two-thirds.

Religious Holidays

It is the instructor's policy to respect the faith and religious obligations of all students. Students with classes or examinations that conflict with their religious observances are expected to notify the instructors well in advance so that mutually agreeable alternatives may be worked out.

Student Accommodations

It is the policy and practice of The University of Notre Dame to provide reasonable accommodations for students with properly documented disabilities. Students who have questions about disability services or who have, or think they may have, a disability are invited to contact

Sara Bea Disability Services for a confidential discussion in the Sara Bea Center for Students with Disabilities or by phone at 574-631-7157. Because the University's Academic Accommodations Processes generally require students to request accommodations well in advance of the dates when they are needed, students who believe they may need an accommodation for this course are encouraged to contact Sara Bea Disability Services at their earliest opportunity. Additional information about Sara Bea Disability Services and the process for requesting accommodations can be found at <https://sarabea.nd.edu/>.

Law students with questions about the academic accommodations process can also contact Christine Holst-Haley in the Student Services Office in Eck 1100

Privacy Practices in This Course

This course is a community built on trust; in order to create the most effective learning experience, our interactions, discussions, and course activities must remain private and free from external intrusion. As members of this course community, we have obligations to each other to preserve privacy and cultivate fearless inquiry. We are also obliged to respect the individual dignity of all and to refrain from actions that diminish others' ability to learn.

Support for Student Mental Health at Notre Dame

Law students are eligible to receive support from a variety of wellness resources offered by the University, including the Law School's dedicated Care and Wellness Consultant Stella Miller (stella.miller@nd.edu). You may schedule an appointment with her through <https://calendly.com/stellamiller>, or you may contact any other Care and Wellness Consultant if you prefer. Care and Wellness Consultants provide support and resources to students who are experiencing stressful or difficult situations that may be interfering with academic progress. Through Care and Wellness Consultants, students can be referred to The University Counseling Center (for cost-free and confidential psychological and psychiatric services from licensed professionals), University Health Services (which provides primary care, psychiatric services, case management, and a pharmacy), and The McDonald Center for Student Well Being (for problems with sleep, stress, and substance use). Visit <https://care.nd.edu/>.

Textbooks, Readings and Style Manual

Textbook:

- There is no textbook or casebook for the course. The instructor will either make readings available on the LMS or will give students the necessary citation information for students to be able to find the readings from free sources to which they have access.

Readings:

- See course calendar for all required, and recommended readings.

General Recommended Readings:

- Börner, K. (2010). "Toward a Science of Science" (Part 3, pp. 50-69) in Börner, K. (2010). *Atlas of science: Visualizing what we know*. Cambridge, Massachusetts: MIT Press.

Börner, K. (2015). *Atlas of knowledge: anyone can map*. Cambridge, Massachusetts: MIT Press.

Jackson, H. E. et al. (2017). *Analytical Methods for Lawyers*. 3rd ed. St. Paul, MN: Foundation Press.

Wheelan, C. (2013). *Naked statistics: stripping the dread from the data*. New York: W. W. Norton & Company.

Style Manual:

- The Bluebook: A Uniform System of Citation (most recent edition).

Graded Course Assignments

Graded Item	Description	Percentage/Points
Attendance and Class Participation	<p>Attendance is mandatory. Unexcused absences or lateness will result in a loss of Attendance and Class Participation Points. Each week, students will have the opportunity to ask questions about and comment on the lecture materials, participate in class activities such as database trainings, and/or learn new techniques and technologies. Degree of participation in these activities will be considered in the awarding of points.</p> <p>If you miss two or more classes with unexcused absences, your final grade will be lowered by one-third of a letter grade (e.g., B+ is lowered to a B.)</p>	15% (150 pts.)
Reflection Papers	<p>Two times during the semester you will be asked to write brief reflection papers—no more than one page in length (double spaced). Points will be awarded based on completion only. You are to reflect on the skills learned in class (since the last reflection paper). What was particularly new to you? What did you already know? What do you think will be particularly useful in your career as an attorney? What is your comfort level applying the new techniques for advocacy? What do you want to know more about? Was one of the readings particularly insightful, helpful, or provocative? Can you articulate a simulated legal advocacy hypothetical to employ the learned skills? If so, what is it? [Note, this is in response to the ABA’s requirement that students be given an opportunity for self-evaluation.]</p>	5% (50 pts.) (25 pts. each)
Three Assignments	<p>These assignments will begin in class and will be completed on your own. Each will be preceded by a non-graded exercise that will give you the skills necessary (with slight changes) to complete your assignment.</p> <ul style="list-style-type: none"> • Excel Assignment (Using Excel as a Data Calculator) • Network Assignment (Visualizing Network Data) • Regression Analysis (Showing Correlation) 	30% (300 pts.) (100 pts. each)
Final Research	Students will have the choice of creating and researching their own data analytics legal case	50% (500 pts.)

Project (instead of a final exam)	hypothetical (subject to instructor approval) or have one provided by the instructor to research. In addition to locating, rearranging, and presenting data for use in an advocacy scenario, students will be expected to document and describe their research and data manipulations. The final research project will include several intermediate steps: a research consultation with a senior partner in your firm (the instructor), brief oral presentation of your data and analysis, and written presentation of your data and analysis. This will take the place of a final exam.	
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Course Calendar

Topics covered during class sessions are subject to change. Due dates and assignments will not change.

Class Date	Topic	Readings /Assignments/Due Dates
Week 1: Mon. Feb. 8	Introduction About the Course Deliverables Introduction to Analytics <ul style="list-style-type: none"> • Definitions • Analytics defined • What is big data? <ul style="list-style-type: none"> ◦ examples • Commodification of data Interpreting the Meaning of Words <ul style="list-style-type: none"> • Originalism • Contemporary dictionaries • Words and Phrases • Historical dictionaries • Mikhail Study • Empirical legal scholarship • Corpus linguistics <ul style="list-style-type: none"> ◦ https://lawcorpus.byu.edu/ ◦ https://www.english-corpora.org/ 	Further Readings (optional): <ul style="list-style-type: none"> • Fred Barbash, <i>Trump's 'emoluments' battle: How a scholar's search of 200 years of dictionaries helped win a historic ruling</i>, WASH. POST (July 27, 2018), https://www.washingtonpost.com/news/morning-mix/wp/2018/07/27/trumps-emoluments-battle-how-a-scholars-journey-through-200-years-of-dictionaries-helped-win-a-historic-ruling/ • Gregory E. Maggs, <i>A Concise Guide to Using Dictionaries from the Founding Era to Determine the Original Meaning of the Constitution</i>, 82 GEO. WASH. L. REV. 358-93 (2014). • ANTONIN SCALIA & BRYAN A. GARNER, READING LAW: THE INTERPRETATION OF LEGAL TEXTS, 415-424 (Appendix A), "A Note on the Use of Legal Dictionaries" (2012). [On course site]. • Supreme Court Ends Emoluments Suits Against Trump, NYTimes, Jan. 25, 2021 https://www.nytimes.com/2021/01/25/us/emoluments-trump-supreme-court.html • Thinking Like a Linguist https://bit.ly/3juEHOj, ABA Appellate Issues (Winter 2020).
Week 2: Mon. Feb. 15	Instructor's Background Instructor's Research Interests Equations vs. Experts <ul style="list-style-type: none"> • When to rely on experts Analytical Framework <ul style="list-style-type: none"> • Variable Measurement Types <ul style="list-style-type: none"> ◦ nominal ◦ ordinal ◦ interval ◦ ratio • Data Structures <ul style="list-style-type: none"> ◦ hierarchical structures ◦ relational structures ◦ temporal structures ◦ spatial structures ◦ spatio-temporal structures 	Further Readings (optional): <ul style="list-style-type: none"> • KATY BÖRNER, ATLAS OF KNOWLEDGE: ANYONE CAN MAP 21-73 (Part 2), "Envisioning Science and Technology" (2015). [On course site]. • IAN AYRES, SUPER CRUNCHERS: WHY THINKING-BY-NUMBERS IS THE NEW WAY TO BE SMART 112-139 (Chapter 5, "Experts vs. Equations") (Paperback ed.). (2008). [On course site]. • DANIEL KAHNEMAN, THINKING, FAST AND SLOW (2011).

	<ul style="list-style-type: none"> ○ textual structures ○ tabular data ○ relational databases ● Unit of analysis ● Question driven (Insight Need) data analysis ● Exploratory data analysis ● Insight need types <ul style="list-style-type: none"> ○ categorizing and clustering ○ ordering, ranking, and sorting ○ distribution ○ comparison ○ trends ○ geospatial location ○ composition ○ relationships 	
<p>Week 3: Mon. Feb. 22</p>	<p>Excel Assignment (Using Excel as a Data Calculator)</p> <ul style="list-style-type: none"> ● Flattening data ● Paste (values) ● Sorting / multi-column sorting ● Creating a data matrix ● Paste (transpose) ● Deleting the redundant half of the matrix ● Excel as a data calculator ● Excel formulas <ul style="list-style-type: none"> ○ Min ○ Max ● Data conversion ● Matrix converted to paired listings ● Pivot tables ● Lookup formulas 	<p>Assignment: Excel Assignment</p>
<p>Week 4: Mon. March 1</p>	<p>Citators and Search</p> <ul style="list-style-type: none"> ● 5 search strategies ● Legal citators ● Web of Science ● PageRank relevance algorithm ● WorldCat <p>Bloomberg Litigation Analytics</p>	<p>Due: Excel Assignment (prior to start of class)</p> <p>Readings (mandatory):</p> <ul style="list-style-type: none"> ● JOHN MACCORMICK, NINE ALGORITHMS THAT CHANGED THE FUTURE: THE INGENIOUS IDEAS THAT DRIVE TODAY'S COMPUTERS 10-23 (Chapter 2, "Search Engine Indexing: Finding Needles in the World's Biggest Haystack") (2012). [On course site]. ● JOHN MACCORMICK, NINE ALGORITHMS THAT CHANGED THE FUTURE: THE INGENIOUS IDEAS THAT DRIVE TODAY'S COMPUTERS 24-37 (Chapter 3, "PageRank: The Technology that Launched Google") (2012). [On course site]. <p>Assignment: Reflection Paper 1</p>

<p>Week 5: Mon. March 8</p>	<p>Lexis Litigation Analytics</p> <p>What are Litigation Analytics?</p> <ul style="list-style-type: none"> • Actionable analytics • Predictive analytics <p>History of Litigation Analytics</p> <ul style="list-style-type: none"> • Lex Machina • Bloomberg • Westlaw • Lexis (Context) <p>Platform Scope and the use of NAS Codes</p> <ul style="list-style-type: none"> • Data harvesting, cleaning, AI, etc. • Nature of Suit Codes (NAS) • Scope notes and scope comparison • Lex Machina vs. Context • Pivot points (broad perspectives) comparison <p>Question Driven Insight Need Framework Applied to Litigation Analytics</p> <ul style="list-style-type: none"> • Importance of enumerated frameworks • Law firm selection & client pitches • Overall litigation strategy • Forum selection • Timing • Brief and motion practice • Expert witness analytics • Damage analytics • Judge and appellate issues <p>Platform Comparisons</p> <p>What is Missing on each Platform?</p> <p>Exploring the Lex Machina Platform</p> <ul style="list-style-type: none"> • Applying the 8 insight need types • Lex Machina vs. Context • Case type exploration • Damages • Exporting to Excel • Court exploration • Judge exploration • Lex Machina apps 	<p>Due: Reflection Paper 1 (prior to start of class)</p>
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<p>Week 6: Mon. March 15</p>	<p>Network Assignment (Visualizing Network Data)</p> <p>Network Basics</p> <ul style="list-style-type: none"> • Network data defined • Network as matrix • Network as edge list • Network as graph • Kinds of networks <ul style="list-style-type: none"> ◦ unimodal ◦ bimodal ◦ multimodal ◦ multiplex • Additional terminology <ul style="list-style-type: none"> ◦ full or complete graph ◦ subgraph ◦ loop ◦ path ◦ greatest connected component ◦ cliques • Network topology and vulnerability • Strength of weak ties <p>Networks Used in the Practice and Study of Law</p> <ul style="list-style-type: none"> • Courtroom diagrams <ul style="list-style-type: none"> ◦ crime syndicates ◦ corporate board interlocks ◦ Panama Papers network • Legal citation networks <ul style="list-style-type: none"> ◦ Ravel view • Understanding patent citation networks <ul style="list-style-type: none"> ◦ Patent Pulse • Understanding the changing properties of the citation networks for different courts <p>Network Assignment Using NodeXL Basic</p> <ul style="list-style-type: none"> • Enron email dataset • Graph metrics • In degree • Out degree • Connected components • Visualizing the network • Highlighting an individual node • Network conceptualization of your own <p>Optional: Network Assignment using Pajek</p>	<p>Assignment: Network Assignment</p> <p>Readings (mandatory):</p> <ul style="list-style-type: none"> • Ryan Whalen, <i>Legal Networks: The Promises and Challenges of Legal Network Analysis</i>, 2016 MICH. ST. L. REV. 539-565 (2016).
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<p>Week 7: Mon. March 22</p>	<p>Westlaw Litigation Analytics</p> <p>Review (Insight Need Types)</p> <p>Thought Experiment</p> <ul style="list-style-type: none"> • How would you systematically review all litigation analytics platforms? <p>Bloomberg Analytics Review</p> <ul style="list-style-type: none"> • Broad perspectives (pivot points) • Contextualized by Insight Need Type <p>Westlaw Litigation Analytics</p> <ul style="list-style-type: none"> • Broad perspectives (pivot points) • Scope of litigation analytics platforms compared • Westlaw litigation analytics scope notes and docket coverage • Case Types analytics • Attorney analytics • Damage analytics • State court analytics • Judge analytics 	<p>Due: Network Assignment (prior to start of class)</p>
<p>Week 8: Mon. March 29</p>	<p>Statistical Analysis</p> <ul style="list-style-type: none"> • Brandeis Brief • Additional Value Types <ul style="list-style-type: none"> ◦ Absolute / Relative ◦ Nominal / Real • Descriptive Statistics <ul style="list-style-type: none"> ◦ Index ◦ Central Tendency (mean, median, mode) • Precision, Accuracy, and Significant Figures • Probability • Correlation Analysis • Standard Deviation • Normal Distribution • Central Limit Theory • Normalization 	<p>Readings (mandatory):</p> <ul style="list-style-type: none"> • CHARLES WHEELAN, NAKED STATISTICS: STRIPPING THE DREAD FROM THE DATA 15-35 (Chapter 2, “Descriptive Statistics: Who was the best baseball player of all time?”) (2013). [On course site]. • CHARLES WHEELAN, NAKED STATISTICS: STRIPPING THE DREAD FROM THE DATA 58-67 (Chapter 4, “Correlation: How does Netflix know what movies I like?”) (2013). [On course site].
<p>Week 9: Mon. April 5</p>	<p>Regression Analysis (Showing Correlation)</p> <ul style="list-style-type: none"> • Positive Linear Correlation • Negative Linear Correlation • Curvilinear Relationships 	<p>Further Readings (mandatory):</p> <ul style="list-style-type: none"> • CONRAD CARLBERG, REGRESSION ANALYSIS: MICROSOFT EXCEL 29-57 (CHAPTER 2, “CORRELATION”) (2016). [On course site].

	<ul style="list-style-type: none"> • No Relationship • Correlation Between Miles Traveled and Traffic Deaths by State • Normalizing Data <ul style="list-style-type: none"> ◦ Making raw numbers per capita • Excel Data Sort (superlatives) • Correlation Function in Excel • Correlation Strength <ul style="list-style-type: none"> ◦ strong, middling, weak • Scatterplot with Regression Line • Linest Function in Excel • Regression Analysis • Multiple Regression Analysis 	<ul style="list-style-type: none"> • CONRAD CARLBERG, REGRESSION ANALYSIS: MICROSOFT EXCEL 103-149 (CHAPTER 4, “USING THE LINEST() FUNCTION”) (2016). [On course site]. <p>Assignment: Regression Analysis</p>
<p>Week 10: Mon. April 12</p>	<p>Empirical Analysis of Courts</p> <ul style="list-style-type: none"> • Citation Network Studies • Diffusion of Ideas Across Courts • Topics / Sources Addressed by Courts • Agreement Levels within Multi-Member Courts <ul style="list-style-type: none"> ◦ <i>Aggregate Harmony Metric</i> • Which Judges and Courts are Most Apt to be Cited • Which Foreign Courts are Most Apt to Cite other Foreign Jurisdictions • Other Empirical Topics: <ul style="list-style-type: none"> ◦ Measures of Judicial Activism ◦ <i>S. Ct. Database</i> (Spaeth) ◦ <i>S. Ct. Compendium</i> ◦ What would a State litigiousness index look like? 	<p>Reading (mandatory):</p> <ul style="list-style-type: none"> • Peter A. Hook, (2014). <i>Evaluating the Work of Judges</i>. In B. Cronin & C. R. Sugimoto (Eds.), <i>Beyond bibliometrics: Harnessing multidimensional indicators of scholarly impact</i> (pp. 345-364). Cambridge, Massachusetts: MIT Press. Available at: https://osf.io/preprints/lawarxiv/968zk/ <p>Further Reading (optional):</p> <ul style="list-style-type: none"> • STEFANIE A. LINDQUIST & FRANK B. CROSS, <i>MEASURING JUDICIAL ACTIVISM</i>. Oxford, Oxford University Press (2009). • Peter A. Hook, <i>The Aggregate Harmony Metric and a Statistical and Visual Contextualization of the Rehnquist Court: 50 Years of Data</i>. <i>CONSTITUTIONAL COMMENTARY</i>, 24(1), 221-264. (2007). <p>Due: Regression Assignment (prior to start of class)</p> <p>Assignment: Reflection Paper 2</p>
<p>Week 11: Mon. April 19</p>	<p>Expert Witness Analytics</p> <ul style="list-style-type: none"> • Federal Rules of Evidence as to Expert Witnesses <ul style="list-style-type: none"> ◦ Daubert Standard and subsequent clarifications ◦ Battle of the Experts • Examples of Experts • Westlaw Edge <ul style="list-style-type: none"> ◦ Expert Directories ◦ Expert Evaluator Report ◦ Expert Challenge Report ◦ Jury Verdicts & Settlements • Lexis Advance 	<p>Due: Reflection Paper 2 (prior to start of class)</p>

	<ul style="list-style-type: none"> ○ Expert Witness Materials ○ Jury Verdicts & Settlements ● Bloomberg Law ○ Searching for experts in the full dockets 	
Week 12: Mon., April 26	<p>Gerrymandering Analytics</p> <ul style="list-style-type: none"> ● What is Gerrymandering? ● Examples of minority rule in the U.S. ● Law Affecting Districting ● Spatial / Geographic Approach <ul style="list-style-type: none"> ○ Gerrymandering Index ○ Polsby-Popper method ● Wasted Vote Approach (<i>Efficiency Gap</i>) ● Cartograms <p>GIS Analytics</p> <ul style="list-style-type: none"> ● Geographic Information Systems (GIS) ● ArcGIS ● Geospatial Visualizations ● Map Projections and Problems ● Flow Maps ● Tube/Metro/Subway Maps <p>Census Data</p> <ul style="list-style-type: none"> ● Census Resources at Notre Dame <p>Data Brokering Industry (optional)</p> <ul style="list-style-type: none"> ● Aggregation ● Sources of Information ● Services offered by Aggregators ● Fair Credit Reporting Act ● Marketing Information Known ● People Search Information Known 	<p>Reading (mandatory):</p> <ul style="list-style-type: none"> ● Nicholas Stephanopoulos & Eric McGhee, <i>Partisan Gerrymandering and the Efficiency Gap</i>, 82 U. CHICAGO L. REV. 831-900 (2015). ● Rucho v. Common Cause, 139 S. Ct. 2484 (2019). <p>Further Readings (optional):</p> <ul style="list-style-type: none"> ● Nat Cohn and Quoc Trung Bu, <i>How the New Math of Gerrymandering Works</i>, N.Y. Times (Oct. 3, 2017). https://www.nytimes.com/interactive/2017/10/03/upshot/how-the-new-math-of-gerrymandering-works-supreme-court.html ● Philip Rocco, <i>Justice Roberts said political science is 'sociological gobbledygook.' Here's why he said it, and why he's mistaken</i>, Washington Post (Oct. 4, 2017). https://www.washingtonpost.com/news/monkey-cage/wp/2017/10/04/justice-roberts-said-political-science-is-sociological-gobbledygook-heres-why-he-said-it-and-why-hes-mistaken/ ● Eric Petry, <i>How the Efficiency Gap Works</i>, Brennan Center for Justice. https://www.brennancenter.org/sites/default/files/legal-work/How the Efficiency Gap standard Works .pdf
Week 13: Mon. May 3	<p>The Ethics of Litigation Analytics and the AI Future of Law</p> <ul style="list-style-type: none"> ● Ethics ● AI Future 	
Week 14: Mon. May 10	<p>Remaining Final Projects</p>	<p>Due: In Class Presentations of Final Research Projects</p>
		<p>Due: Final Research Project. Tuesday, May 11 at 11:59 P.M. instead of a final exam. (Final examinations are from Thursday, May 13 to Thursday May 20.).</p>

Final Project Description

- 50% of course grade (500 pts.). (Instead of a final exam).

Component Parts:

- In office consultation with your assigning partner (your professor). (50 pts). (10% of Final Project Grade). **To be completed by Monday, April 26.** Should be viewed as a status update with your managing/assigning partner. Work should be started, but very much in progress. Professor will provide guidance as to subsequent steps, recommended tools and sources, and/or additional avenues of inquiry as appropriate. This should be helpful guidance as what remains to be completed and what is too much work for a one-hour course.
- In class Presentation of Final Research (50 pts) (10% of Final Project Grade). **On Date of the last class. Monday, May 10.** What were the highlights of your inquiry? What surprised you? Do you have any charts that efficiently convey your findings? Please have PowerPoint slides prepared. However, your tone can be informal and relaxed. If choosing the litigation analytics option, be prepared to recommend your preferred analytics platform and the one your firm should purchase if they can only afford one?
- Final Submissions **Due: Tuesday, May 11 at 11:59 PM.** (400 pts). (80%). (See rubric below). Appropriate writings with charts, figures, appendices, etc. as needed. Any and all data files relied upon for analysis. Some students will submit memos, some will submit briefs, etc., as needed. Feel free to include screen shots (10 or less) and / or replicate tables and charts. Also, if technology, available data, or your current skill-set limit the type of inquiries you would like to have conducted or the types of visualizations you would have liked to have seen produced, feel free to describe in words what you would have liked to have accomplished.

Options:

Students will have the choice of creating and researching their own data analytics legal case hypothetical (subject to instructor approval) or have one provided by the instructor to research. In addition to locating, rearranging, and presenting data for use in an advocacy scenario, students will be expected to document and describe their research and data manipulations. The final research project will include several intermediate steps: a research consultation with a senior partner in your firm (the instructor), oral presentation of your data and analysis, and written presentation of your data and analysis. This will take the place of a final exam.

Litigation Analytics Option:

Scenario: Choose a particular firm, practice area, managing partner, applicable federal district court, and do all applicable analytics (compared across all platforms). Questions

to explore include, but are not limited to:

- What companies does your firm/partner represent?
- What practice areas does your firm/partner handle?
- What are the properties of the judges in your chosen jurisdiction?
- As to a self-defined issue, which judge do you want to most appear in front of, and why?
- As to a self-defined motion practice issue, what are your chances and what do you recommend to your client/partner?
- What court cases does your particular judge most rely upon as to that particular motion area?
- Find several successful motions in the docket to emulate as to your particular topic.
- What differences do you see between the platforms (Bloomberg, Lexis, Westlaw)?
- Who are a few experts in your chosen area? Use the expert witness analytics to support your choice.

As to a litigation analytics problem, if your hypothetical does not let you fully explore / compare the analytics offerings, you can relax your criteria (but be explicit about this in your write-up) to comment fully on the world of possibilities. Litigation analytics final project students can distinguish themselves by seeking to explain why differences between the platforms are occurring if/when observed.

Rubric for Grading Written Submission (400 points):

150 points. Thoroughness of the analysis. Were all of the issues and insight needs sought by the researcher adequately explored? Are there glaring, unexplained gaps in your research?

100 points. Adequacy of explanations. Did the student note peculiar, idiosyncratic, or surprising results? Were plausible explanations given for those results?

100 points. Quality of the writing and presentation. Was the paper free of grammatical and spelling errors? Was the paper formatted consistently throughout? Were charts, tables or other graphics included when appropriate (when this was an efficient way to convey information)? Were section headings used to guide the reader? Were there blatant Bluebook errors?

50 points. Was the simulated research or litigation insight need maintained throughout? Given a wide degree of latitude, was it plausible?

Past Student Final Projects:

- Providing Evidence of California School District's Race-Based Educational Gerrymandering of Intra-District School Attendance Zones
- Regression Analysis of an Event Study in a Securities 10b-5, Fraudulent Misrepresentation Case Brought by Class of Shareholders
- Comparing Bloomberg Analytics, Lex Machina, and Westlaw Edge for Sidley Austin LLP
- Litigation Analytics for the Intellectual Property Group of Sullivan & Cromwell
- Strategies to Litigate a Motion to Dismiss in a Securities Action Based on Litigation Analytics Research on Willkie Farr & Gallagher LLP
- Predicting Prejudice: Resource Allocation for Hate Crimes Against Sexual Minorities for the Department of Justice, Civil Rights Division
- Comparing the Litigation Analytic Platform Results for Winston & Strawn LLP
- The Likelihood of Getting a Motion to Dismiss in the *Walker Shipping* Case for the Securities Practice Group of Fried Frank
- Longitudinal Statistical Analysis of Population Variances in Support of a Brief Amicus Curiae Asserting that Argentina's Deputy's Chamber is not Representative of the Population Distribution as Prescribed by Section 45 of the Constitution
- Litigation Analytics in the Context of Perkins Coie LLP and a Hypothetical Tech Firm in the Northern District of California.
- Transactional Litigation Analysis of Cahill Gordon & Reindel LLP on Bloomberg Law
- A Litigation Analytics Comparison of Seattle's Perkins Coie (PC) and Davis Wright Tremaine (DWT).
- Mens Rea Data Visualization Using Ravel and VOSviewer
- An Analysis of 18 USC 922(g), Prohibited Possession of a Firearm or Ammunition, Sentencing in the Eastern District of New York (EDNY)
- Comparing the Litigation Analytics for Mayer Brown LLP
- Motion Outcome Prediction in *Reiner v. Teladoc Health*: Applying Litigation Analytics to Paul Weiss's Securities Litigation Practice
- Litigation Analytics Comparison Memorandum for Wilmer Hale in the Context of Patent Litigation
- To Settle or Not to Settle: A Simple Macro Model for Cases Involving Publicly Listed

Corporations

- An Empirical Analysis of District Judges' Legal Backgrounds & How it Affects their Decision-Making
- Litigation Analytics and the American Civil Liberties Union
- Using Network Visualizations to Understand Law Firm Dynamics and Variations in Litigation Analytics Platforms: A Study of Arnold & Porter and its Clients